

Rush!

PRELIMINARY ISSUE

11.02.15 **Accept**

Page 1

Accept

Setup Start

Stop



Cust Item ID:

Customer:

Reference:

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3199	DUR E 11.07.15								
100	FLOW WATER JET	0.00							
	Waterjet								
FLOW CNC Waterjet	Memo	0.00							
304.046	Cut as per Dwg D3199								
	Dwg Rev: PE2								
	Prog Rev: PE2								
	Deburr if required								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
	QC								
Quality Control	Memo	0.00							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			



NOTE: Date & initial all entries




Work Order ID 71785

Tuesday, July 12, 2011 9:15:34 AM

Page 2

Item ID:	D3199-3	Accept		Setup	Start	
Revision ID:						
Item Name:	Bracket, Fwd LH				Stop	
Start Date:	7/12/2011	Start Qty:	1.00			
Required Date:	7/18/2011	Req'd Qty:	1.00			
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120  QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00	<i>inspected to PEZ Dry only</i> <i>8/17/13</i>						
130  Brake NC Brake NC	Bend as per dwg Small Fab Memo	0.00 0.00	<i>SB 11/07/13</i>			<i>(2)</i>			
140  QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00	<i>inspected to PEZ Dry only</i> <i>8/17/13</i>						

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 71785

Tuesday, July 12, 2011 9:15:34 AM



Page 3

Item ID: D3199-3	Accept		Setup	Start	
Revision ID:					
Item Name: Bracket, Fwd LH				Stop	
Start Date: 7/12/2011	Start Qty: 1.00				
Required Date: 7/18/2011	Req'd Qty: 1.00				
Reference:					
			Cust Item ID:		
			Customer:		

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 Powdercoat Powder Coating	Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3	0.00							
<div style="display: flex; justify-content: space-between;"> <div> <p><i>M115128</i></p> <p>Memo</p> <p>START TIME: <i>10:45</i></p> <p>OVEN TEMPERATURE: <i>320°F</i></p> <p>FINISH TIME: <i>11:15</i></p> </div> <div> <p><i>2x</i> <i>Ø</i> <i>M.L</i> <i>11/07/13</i></p> </div> </div>									
160 QC	QC3- Inspect Part Finish	0.00							
<div style="display: flex; justify-content: space-between;"> <div> <p>Memo</p> </div> <div> <p><i>2x</i> <i>Ø</i> <i>U</i> <i>11/07/13</i></p> </div> </div>									
170 Packaging	Identify as per dwg & Stock Location:	0.00							
<div style="display: flex; justify-content: space-between;"> <div> <p>Memo</p> </div> <div> <p><i>JB</i> <i>(2)</i> <i>11/07/13</i></p> </div> </div>									
Packaging		0.00							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 71785

Tuesday, July 12, 2011 9:15:34 AM



Page 4

Item ID: D3199-3

Accept



Setup Start



Revision ID:

Stop



Item Name: Bracket, Fwd LH

Start Date: 7/12/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 7/18/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

CK 11/07/15

11.07.13

POSITIVE RECALLEFFECTIVE 11.07.12 AUTH LuRELEASED Lu DATE 11.07.15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, July 12, 2011 9:15:44 AM

Page 1

Work Order ID: 71785

Parent Item: D3199-3

Parent Item Name: Bracket, Fwd LH



Start Date: 7/12/2011



Required Date: 7/18/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP RevA: RevC-prelim DD verified by:EC
11.03.31 as per ecn 11-531 DD verf:EC

IPP Rev:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S20GA  304/316 .040 Sheet		Purchased	No			100	sf	115.0630	0.1673	0.176105	1.5		
											117933		

Location

Loc Qty

Loc Code

MAT020

115.063

116623

0.2

117550

9.363

117933

105.5

117933

2

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order: 71785
Description: BRACK #7 FWD LH	Part Number: D3199-3
Inspection Dwg: D3199-3 Rev: 021	Page 1 of 1

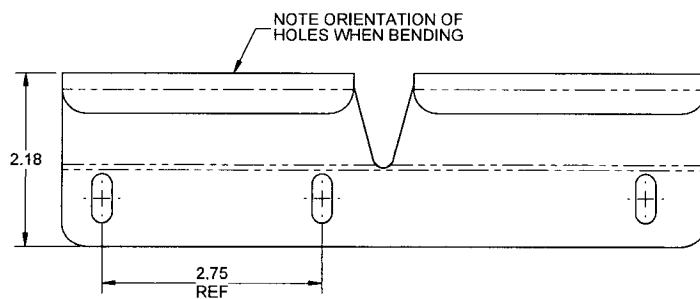
FIRST ARTICLE INSPECTION CHECKLIST

X

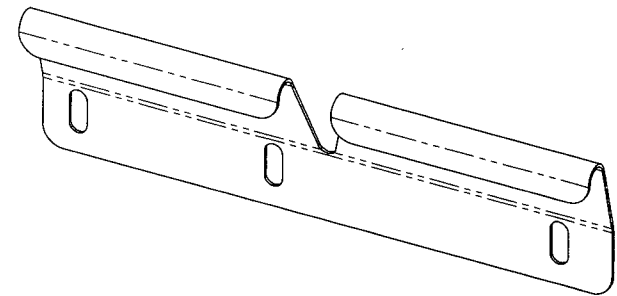
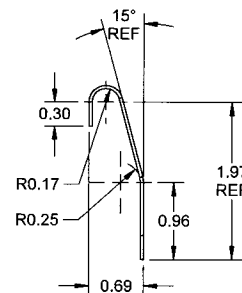
[illegible]

Measured by: <u>BB</u>	Audited by: <u>S</u>	Prototype Approval:
Date: <u>11-7-12</u>	Date: <u>11/02/13</u>	Date:
<u>is PER Day only</u>		

Rev	Date	Change	Revised by	Approved
A		New issue	KJ/JLM	



D3199-3 BRACKET
PE2 MADE FROM D3199-3F



717.85

PRELIMINARY ISSUE
11.07.11

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. PE2
MFG. APPR.		D3199	SHEET 2 OF 4
APPROVED		TITLE	SCALE
DE APPR.		BRACKET	NTS
DATE	11.07.11	<small>COPYRIGHT © 2003 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

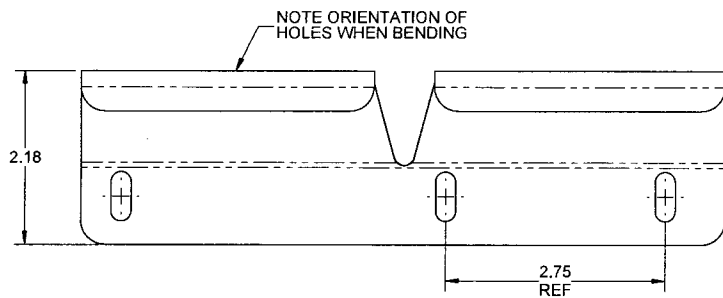
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

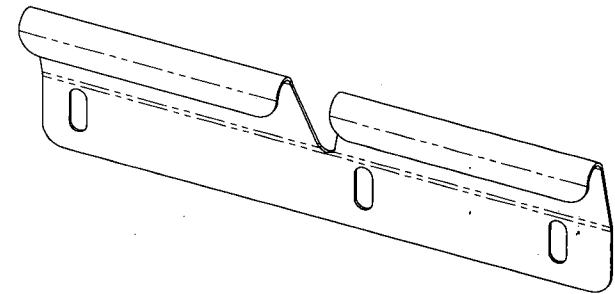
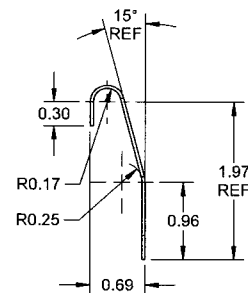
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3199-4 BRACKET
PE2 MADE FROM D3199-3F



11785

PRELIMINARY ISSUE

11.07.11

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. PE2
MFG. APPR.		D3199	SHEET 3 OF 4
APPROVED		TITLE	SCALE
DE APPR.		BRACKET	NTS
DATE	11.07.11	<small>COPYRIGHT © 2003 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

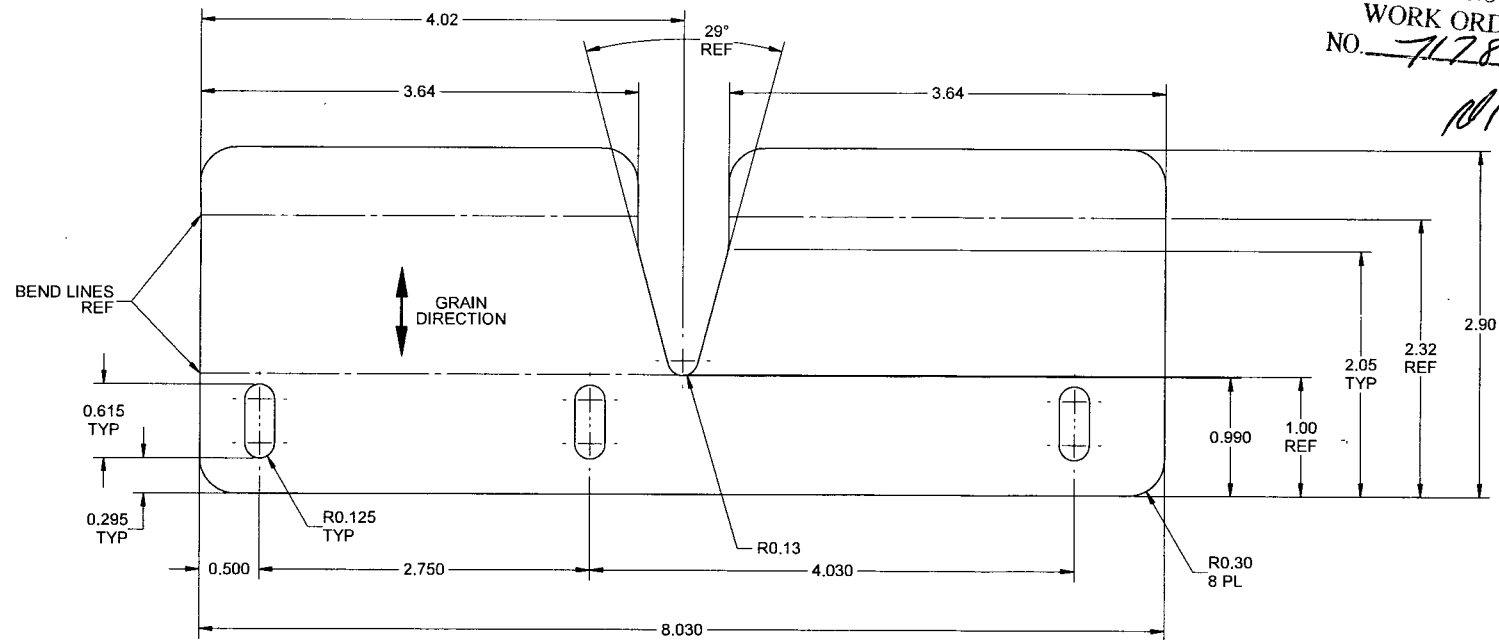
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 71785

11-07-12



PE2 **D3199-3F FLAT PATTERN**

PRELIMINARY ISSUE

11.07.11

NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET, 0.040 THICK, ANNEALED, 2B FINISH
PER MIL-S-5059, OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240
REF DART SPEC M304S20GA
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.25 lbs

DESIGN		DART AEROSPACE LTD
DRAWN		HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO. REV. PE2
MFG. APPR.		D3199 SHEET 4 OF 4
APPROVED		TITLE SCALE
DE APPR.		BRACKET NTS
DATE	11.07.11	COPYRIGHT © 2003 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

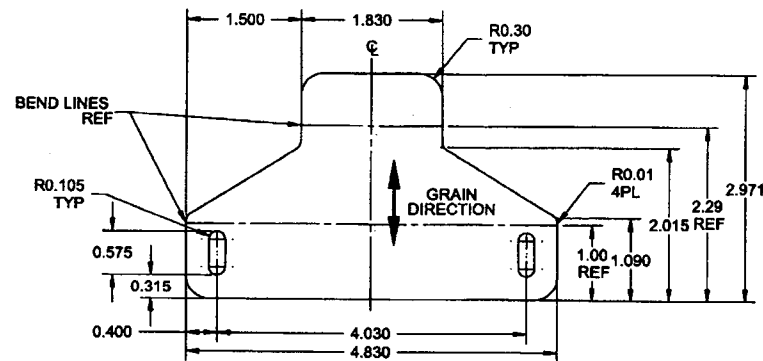
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

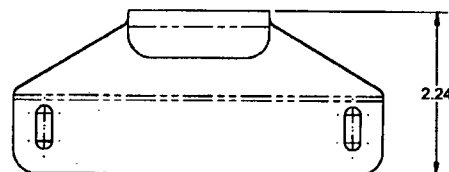
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

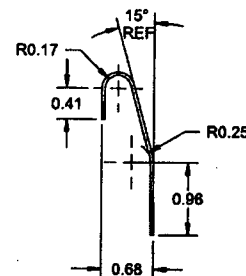
NOTE: Date & initial all entries



D3199-1F FLAT PATTERN



D3199-1 BRACKET
MADE FROM D3199-1F



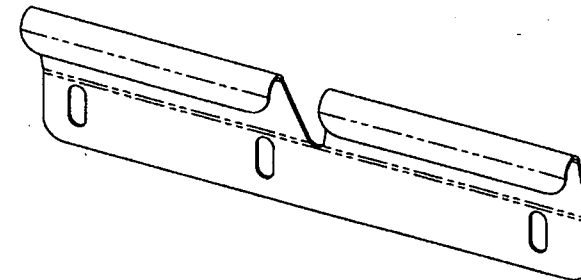
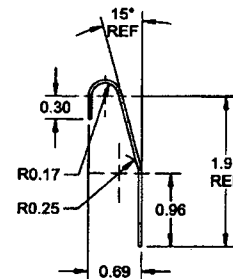
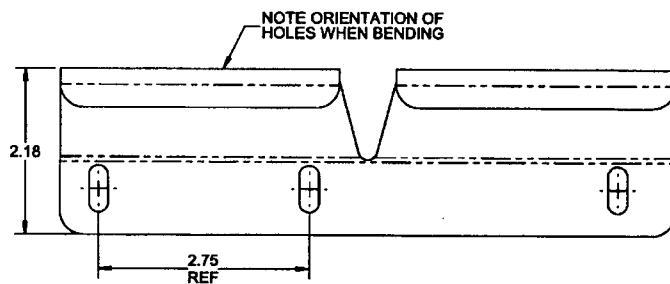
NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET, 0.040 THICK, ANNEALED, 2B FINISH
PER MIL-S-5059, OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240
REF DART SPEC M304S20GA
- 2) FINISH: POWDER COAT "GREY SANDTEX" (4.3.5.8) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3199-X" AND B/N "BXXXXX" PER QSI 044 8.1
- 7) WEIGHT: D3199-1 = 0.11 lbs, D3199-3/-4 = 0.26 lbs EACH

E	RE-DESIGNED D3199-3/-4-3F PER CUSTOMER FEEDBACK TO OPTIMIZE FIT.	MB	11.07.11
D	RE-DESIGNED D3199-3/-4-3F PER CUSTOMER FEEDBACK TO ELIMINATE BINDING OF DOOR ONCE BRACKETS ARE INSTALLED. REF.: PAR11-79	MB	11.03.21
C	ADD -3/-4 PART (SHEET 2-4)	HS	09.11.19
B	2.24 WAS 2.142; ADD FINISH; UPDATE DWG	CB	06.11.01
A	NEW ISSUE	CP	03.08.05
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>gp</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>h</i>		
CHECKED	<i>h</i>	DRAWING NO.	REV. E
MFG. APPR.	<i>h</i>	D3199	SHEET 1 OF 4
APPROVED	<i>h</i>	TITLE	SCALE
DE APPR.	<i>h</i>	BRACKET	NTS
DATE	11.07.11	COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

RELEASED
2011-07-18
MB

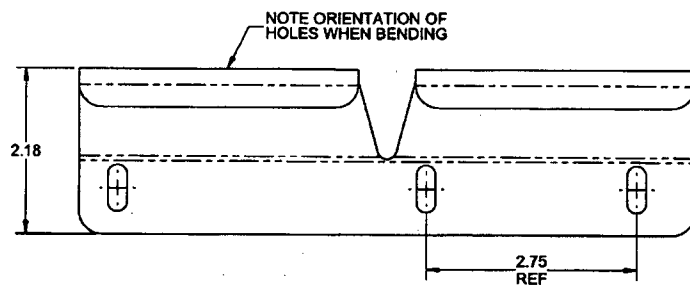
71785



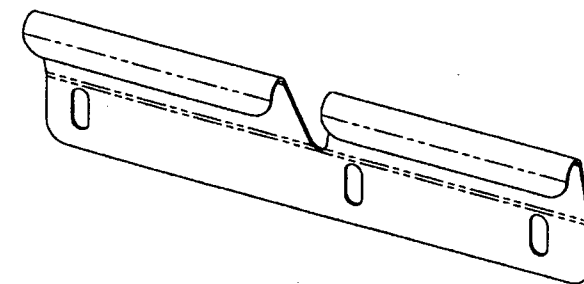
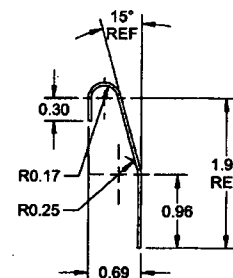
D3199-3 BRACKET
MADE FROM D3199-3F

RELEASED
2011-07-18







DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3199	SHEET 2 OF 4
APPROVED		TITLE	SCALE
DE APPR.		BRACKET	NTS
DATE	11.07.11	<small>COPYRIGHT © 2003 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

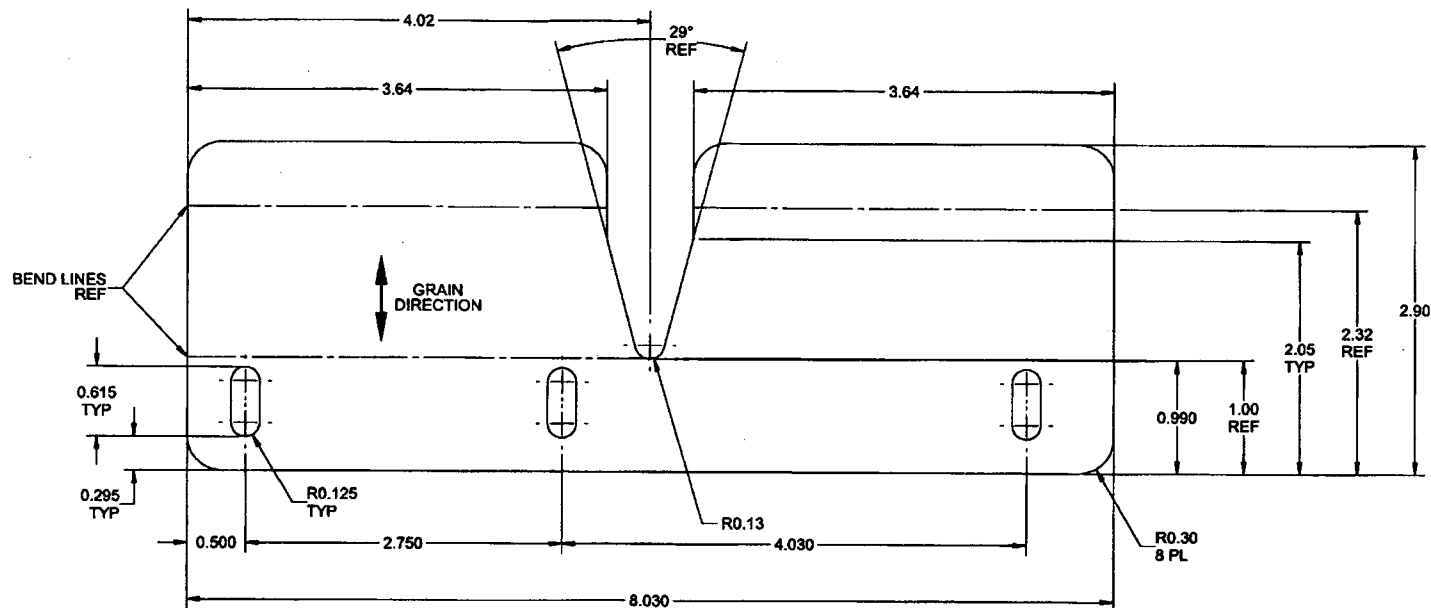


D3199-4 BRACKET
MADE FROM D3199-3F



RELEASED
2011-07-18
JMT

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3199	SHEET 3 OF 4
APPROVED		TITLE	SCALE
DE APPR.		BRACKET	NTS
DATE	11.07.11	COPYRIGHT © 2003 BY DART AEROSPACE LTD THIS DOCUMENT IS PRELIMINARY AND CONFIDENTIAL. IT IS NOT TO BE USED FOR ANY PURPOSE OR DISCLOSED OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.	



D3199-3F FLAT PATTERN

RELEASED
2011-07-18

NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET, 0.040 THICK, ANNEALED, 2B FINISH
PER MIL-S-6059, OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240
REF DART SPEC M304S20GA
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.25 lbs

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN				
CHECKED			DRAWING NO.	REV. E
MFG. APPR.			D3199	SHEET 4 OF 4
APPROVED			TITLE	SCALE
DE APPR.			BRACKET	NTS
DATE	11.07.11		COPYRIGHT © 2003 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	